

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/693,919	10/23/2000	Tomohito Shida	1083.1076/JDH	8369
21171 7.	590 11/07/2005		EXAMINER	
STAAS & HALSEY LLP SUITE 700			DURAN, ARTHUR D	
1201 NEW YORK AVENUE, N.W.			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20005			3622	

DATE MAILED: 11/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary			Application No.	Applicant(s)	Applicant(s) SHIDA, TOMOHITO			
			09/693,919	SHIDA, TOMO				
			Examiner	Art Unit				
			Arthur Duran	3622				
Period fo	The MAILING DATE of this commun or Reply	nication appea	ars on the cover sheet t	with the correspondence	address			
WHIC - Exte after - If NC - Failt Any	CORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE Mosions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this compared to reply is specified above, the maximum soure to reply within the set or extended period for reply received by the Office later than three months ed patent term adjustment. See 37 CFR 1.704(b).	MAILING DAT s of 37 CFR 1.136(munication. tatutory period will y will, by statute, ca	TE OF THIS COMMUN a). In no event, however, may a apply and will expire SIX (6) MO ause the application to become	IICATION. a reply be timely filed DNTHS from the mailing date of thi ABANDONED (35 U.S.C. § 133).				
Status								
1)⊠	Responsive to communication(s) file	ed on 10/6/05	5.					
2a)⊠								
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
,	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposit	ion of Claims				·			
4)⊠	Claim(s) 1-17 and 20 is/are pending	in the applic	eation.					
,	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)	Claim(s) is/are allowed.							
6)⊠	Claim(s) 1-17 and 20 is/are rejected	j.						
7)	_							
8)	Claim(s) are subject to restri	ction and/or e	election requirement.	•				
Applicat	ion Papers							
9)	The specification is objected to by the	ne Examiner		•	· •			
•	The drawing(s) filed on is/are		ted or b) objected to	by the Examiner.				
٠٠/	Applicant may not request that any obje							
	Replacement drawing sheet(s) including		• , ,					
11)	The oath or declaration is objected t	=						
Priority (under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:								
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
	application from the International Bureau (PCT Rule 17.2(a)).							
* 5	See the attached detailed Office action	· /		ot received.				
			·					
		•						
Attachmen 4. ⊠ Nasia	` '			. Summary (DTO 443)				
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (F	PTO-948)	4) Interview Summary (PTO-413) Paper No(s)/Mail Date					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal Patent Application (PTO-152)								
Pape	Paper No(s)/Mail Date 6) Uther:							

1. Claims 1-17 and 20 have been examined.

Response to Amendment

2. The Amendment filed on 10/6/05 is sufficient to overcome the prior rejection. A new reference has been added to the 35 USC 103 rejection.

Claim Rejections - 35 USC § 112

3. Claim 1-17 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim amendments made on 10/6/05 render the claims unclear.

As an example, claim 20 states, "terms of a transaction. . based on a respective rate of reservation to reflect changes to conditions of the terms occurring at the first time interval and the second time interval". The claim is unclear. The relation between the terms of transaction, rate of reservation, and changes in condition is unclear. For example, do the changes of conditions affect the rate of reservation and the rate of reservation affect the terms of transaction? Or, do the rate of reservation and changes in condition independently affect the terms of transaction?

Or, in claim 1, is the rate of reservation a current number for how many reservations are made or an estimate of how many reservations will be made based on the factors affecting the discount services?

Also, Examiner notes that the Attorney of Record, Randall Beckers (30,358), was contacted on November 1, 2005 at the telephone number (202)434-1500 provided in the Office Action dated 10/6/05. Examiner informed the Attorney of the Examiner's concerns with the amended claims dated 10/6/05 and pointed out the features of concern. Attorney informed the Examiner that the Attorney would call the Examiner back to discuss the claim amendments in more detail. However, the Examiner received no further communications from the Attorney.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schiff (6,477,533) in view of DeLorme (5,948,040) in view of Baker (6,266,648) in view of Cragun (6,622,125) in view of Demir (2001/0044788) or in view of Campbell (5,918,209).

Claim 1, 17, 20: Schiff discloses a method for accepting transaction reservation, comprising the steps of:

electronically presenting information on discount services defined for each time period to a plurality of customers (col 20, lines 41-44; col 20, lines 58-65; col 22, lines 1-13; col 11, line 60-col 12, line 17; col 12, lines 22-36; col 7, lines 20-34);

Art Unit: 3622

electronically accepting information on transaction reservation of discount services at a selected time period by a customer (col 12, lines 17-23; col 12, lines 22-36); and performing a transaction according to the reserved discount services, when the visiting time of a customer to a shop, or the finish time of the transaction is included in the time period in association with said accepted information on transaction reservation (col 20, line 49-col 21, line 12; col 13, lines 17-22; col 1, lines 22-26; col 22, lines 1-5; col 12, lines 14-17).

Schiff further discloses that the time period can be a defined as a term for the transaction (col 20, lines 41-44; col 20, lines 58-65; col 22, lines 1-13).

Because Schiff discloses custom packages can vary based on sailing date and special discounts (col 1, lines 21-26), Schiff implies that custom packages can be created where special discounts and sailing dates are related variables to the overall package.

Schiff further discloses that incentives, time periods, and reservations are related (col 22, lines 1-13; col 1, lines 22-26), accepting the transaction reservation for the transaction target, performing a transaction in accordance with the transaction reservation (col 12, lines 17-36), and re-presenting data based on the accepted transaction reservation for the transaction target (col 11, lines 10-16; Fig. 2b; Fig. 3a).

Schiff does not explicitly disclose that the discounts are related to the time period that the reservation is made for.

However, DeLorme discloses that presenting bargain data to a transaction target related to the time period that the reservation is made for (Fig. 1c; Fig. 4; Fig. 5d, item 595; Fig. 6; col 41, lines 13-32; col 67, line 60-col 68, line 6; col 50, lines 38-45).

Art Unit: 3622

DeLorme further discloses re-presenting bargain data based on the accepted reservation for the transaction target (Fig. 9b; Fig. 7b; Fig. 7a; Fig. 5d, item 595).

DeLorme further discloses a terms determination unit for determining terms for a transaction of a transaction target for each time period (Fig. 1c; Fig. 4; Fig. 5d, item 595; Fig. 6; col 41, lines 13-32; col 67, line 60-col 68, line 6; col 50, lines 38-45); and a display system for displaying the terms for the transaction, wherein the transaction reservations are made via the plurality of terminal devices based on the display terms for the transactions (Fig. 5d; Fig. 1c; Fig. 9b).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add DeLorme's reservations goods or services with time period based discounts to Schiff's time period, reservation, discount related information. One would have been motivated to do this in order to provide the customer with further, specific information on the relation of time periods, reservations, and discounts.

Baker further discloses benefits and discounts (col 1, lines 10-50); reservations (Fig. 3); timing restrictions and other terms on applicable discounts (col 1, lines 55-62); time frame restrictions and other terms on applicable discounts (col 5, lines 35-45; col 6, lines 40-47; col 6, lines 47-61; col 7, lines 4-11);

Baker further discloses offering specialized target discounts where the terms or target can be varied including varying time periods for when the discount would apply (col 8, line 60-col 9, line 10) and specialized discounts based on the time between the when the reservation is made and when the reservation is made for (col 9, lines 14-26).

Art Unit: 3622

Baker further discloses correlating time periods for reservations to discounts (col 9, lines 31-64).

Baker further discloses that different time periods have different discounts and that the discount information for the different time periods is dynamic (col 10, line 59-col 11, line 7). Also, note that Baker discloses that the time between when the reservation is made and the time that the reservation is made for can be relevant to the discount amount (col 9, lines 14-26). Therefore, both the reservation time and the time period the reservation is made for are relevant to the discount.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Baker's reservations for goods or services with time period based discounts that reflect temporarily changing conditions to Schiff's time period, reservation, discount related information. One would have been motivated to do this in order to provide the customer with further, specific information on the relation of time periods, reservations, and discounts.

Baker also discloses varied time periods (June or July) and that the user can select a time period within the varied time periods (col 10, line 58-col 11, line 7).

Also, note that Baker (col 9, lines 14-26) discloses 'rapidly changing conditions' and that a discount is offered several days before a certain date and that the discount is offered for that date based on the temporarily changing condition that the plane is half full. Therefore, both the time period that the reservation is made in (several days before), the time period for the transaction or travel to be enacted (the date of the flight or the time period that the user will be

away or travelling), and the temporarily changing condition (the plane is presently half full) of the reservation are relevant to the discount being offered.

Additionally, DeLorme discloses making reservations and that information on factors affecting reservations can be provided to the user and that temporal data that affects reservations can be provided to the user including information such as time periods and weather related information:

- "(9) http://www.expedia.msn.com offers a similar Internet Web Site "travel agency" to book flights, hotel rooms, and rental cars; to participate in travel forums; and to browse assorted news, weather, currency, multimedia guidebooks, and photographs. These types of online systems have some capability in permitting the user to gain access to a wide array of services, including travel and activities; however, as earlier noted, this capability is not easily enacted in that the user must go through a considerable search process in order to gather information regarding topics, events, available goods or services, and/or points of interest at the travel destination or along the travel route, or related to the user's selected travel time frame. Other Internet sites concentrate on local directory listing information but do not provide readily useable travel planning, itinerary, routing and/or booking capabilities--e.g., CitySearch.TM. and MetroBeat.TM. at http://www.citysearch.com and Bigbook's Internet Yellow Pages at http://www.bigbook.com (col 3, line 63-col 4, line 15);
- (66) Also included in the standard TRIPS data structure, shown in FIG. 3, is a substructure for characteristic TEMPORAL DATA, in turn, managed primarily by the Temporal Subsystem 223 in FIG. 2 (also, in TIMES, at 419, in FIG. 4). Such TEMPORAL DATA addresses years, dates, times, other usual chronological measures, indicators and/or arrays

Art Unit: 3622

pertaining to events, time periods, appointments, actual happenings or postulated temporal occurrences--as recorded, proposed, scheduled, negotiated or predicted at points or periods in time, typically by one or more persons, interested parties or organizations, including TRIPS retail users or participating travel information/service providers. In FIG. 2, TRIPS 203 stores, retrieves and processes TEMPORAL DATA or chronologically related information utilizing well known means. TEMPORAL DATA in FIG. 3 and corresponding Temporal or Times Subsystem further include or manage the following: (1) for typical well-articulated TRIPS embodiments, an extensive, browsable, searchable calendar database and display of EVENTS OF INTEREST (EOIs) for queries and responses related to scheduled, predicted or proposed event of all kinds; (2) the related SCHEDULER sub-menu functionality for travel itinerary management, as presented heretofore in FIG. 1C under 161, and further described hereinafter relative to FIG. 6; (3) digital almanac functionality formed of tools and data related to the dates/times and other dimensions of natural phenomena--such as sunrise, sunset, high and low tide, moon phases, rainfall/temperature averages, and other data which is useful for planning and scheduling outdoors activities like hiking, camping, boating, observing nature, and so forth--as described in more detail hereinafter, with particular reference to FIGS. 6 and 9; (4) updates or more current information on diverse topics, replacing or supplementing earlier information and preferably provided online for freshness" (col 33, lines 17-52).

DeLorme further discloses discounts and special offers that vary (below and throughout the DeLorme disclosure):

"(6) The user can make reservations and buy various tickets in "real-time" online--and download "today's" special <u>discount</u> offers from hosts of participating restaurants, hotels, retail

Art Unit: 3622

shops, car rental agents, outdoor expedition outfits, or other third-party providers of goods/services throughout the United States, Canada and Mexico (col 14, lines 25-35);

(11)(2) paper or sheet media maps, travel directions, itineraries or travel schedules, reservation/discount offer/ticket documents, supplemental text and/or graphic information about events of interest (EOI) or points of interest (POI) 109" (col 15, lines 35-40).

DeLorme discloses special offers presented relative to temporally changing conditions including the utilization of time periods:

"(49) for example, including other characteristic TRIPS records information about one or more lodgings or other accommodations located nearby the performance location(s), or available transportation to the performance(s), or proximate timely special offers e.g. for tickets to the music performance(s). More details on combined searches appear hereinafter relative to FIGS. 2-8 (col 29, lines 1-10);

(119)>(2) persons in the reservation party, and so forth--using the 595 dialog box. The 595 dialog box includes facilities for the user to input or accept <u>special</u> offers, such as a <u>discount</u> for meals at certain times. The user executes or "books" the proposed reservation, pushing the "BOOK IT" button in the "RESERVATIONS--TICKETS--COUPONS" dialog box (col 50, lines 37-45);

(155) Thus, the TRIPS invention facilitates not only individualized travel planning or informational output but also contractual or transactional travel arrangements--e.g. ticket purchases, making reservations, taking advantage of special goods/service offers or options (typically subject to locational and temporal restrictions or conditions)--and so forth (col 63, lines 35-45);

(166) 5) date/time i.e. one or more chronological points in time, time-frames or temporal ranges relating to the goods/services designated in the TRIPS map ticket e.g. air flight departure date/time, time period for which a <u>special</u> offer is open, curtain time or the duration or start time of an entertainment or educational event, seasonal/calendar/natural phenomena temporal information, hotel check-in time, service appointment date/time" (col 67, line 60-col 68, line 2).

Baker discloses discounts to changing conditions such as locations and short time frames, the providing of discounts related to inventory, and the providing of discounts related to special conditions such as a service being half-utilized or half-full:

- "(25) Further, the system offers the unique benefit of allowing service and goods providers to make available specialized "niche" discounts or marketing schemes. Since the system sorts or correlates benefit information, it would allow providers of goods and services to target particular segments of the market. For example, in the travel industry, hotels could offer through the system special discounts at particular locations or for very short time frames, in a manner which would not otherwise be economically feasible with other marketing methods. In the case of those offering goods for sale, a geographically weak sector of the market or one which has excess inventory could be specifically targeted for discounts in the data base. In other words, the system allows particular segments of the market to be precisely targeted by providers of goods and services offering special discounts to consumers affiliated with enabling organizations (col 8, line 60-col 9, line 10);
- (26) A further advantage of the system relates to the relatively short lead times required in connection with offering benefits. According to the system, <u>discounts</u> could be developed and offered very quickly with very short lead times by simply adding an enabling organization

benefit file to the database along with associated correlation information. This would enable a service provider to take advantage of rapidly changing conditions or short-term opportunities. As an example, several days before a scheduled flight, an airline might recognize that a flight was going to depart half-full. Under such circumstances, the airline might wish to offer discount benefits to members of particular enabling organizations which patronize the airline. The result is a marketing benefit for the airline and a special premium to the enabling organization, as well as its members" (col 9, lines 10-26).

Cragun discloses utilizing time, date, weather, customer, in-store data to predict customer sales and utilize the information with a purchase advisor system (Fig. 18; Fig. 19).

Cragun discloses the discount services are determined based on calculations results of factors affecting the discount services, providing promotions based on time periods and factors that affect the purchases for those time periods, providing promotions based on calculations of factors that affect transactions during different time periods or under different conditions:

"(10) In a parallel distributed processing model, information processing takes place through interactions of simple processing elements that send excitatory and inhibitory signals to other processing elements. In a neural network, a data item is represented in numerical form and is presented to the neural network. In this context, the processing elements referred to as neurons can represent, for example, hypotheses about which sales <u>promotion</u> program is most likely to elicit viewer interaction given a <u>weather</u> season or which sales <u>promotion</u> program is most likely to attract viewers given a particular time of day. In the preferred embodiment, neural network architecture comprises a first group of input neurons, each of which are

Application/Control Number: 09/693,919 Page 12

Art Unit: 3622

connected to one or more layers of intermediate neurons. The layers of intermediate neurons are connected together and ultimately to a layer of output neurons. Information is processed by the network as data flows from the input neurons, through the intermediate layers, and finally to the output neurons. Each neuron in one layer is connected to every neuron in adjacent layers (col 6, lines 27-46);

- (6) Trends in purchases are sometimes relatively simple to observe. For example, there typically is a seasonal need for particular items, such as coats during winter or sandals during summer. Both national and local marketing campaigns might choose to call attention to such items through a sales <u>promotion</u> comprising a temporary price reduction. Presumably, customers will be motivated by the seasonal need and by the price reduction to purchase the items, thereby creating higher volume sales and increased profits. Another example of an instore sales <u>promotion</u> is one that occurs after a sales clerk completes a transaction for the purchase of an item by suggesting the purchase of a complementary item. A typical suggestion occurs when, for example, a clerk suggests the purchase of an electric light bulb after a customer has already purchased a lamp or suggests a sauce or topping to go along with a purchased food entree. Given a set of sales <u>promotions from which a promotion</u> is selected, a better quality selection is one that is more likely to result in an additional purchase (col 1, lines 40-60);
- (48) After all of the purchase transactions in the relevant <u>time period</u> have been processed, an outcome of "done" at the decision box numbered 224, the processing for the creation of the class update structure is finished (box 225) and processing resumes with the flow diagram box numbered 204 in FIG. 14 (col 15, lines 4-10);

Art Unit: 3622

(57) The first data field illustrated in the data structure 303 is for the time of day 304.

Time of day can be important in predicting customer populations because, for example, buyers with particular characteristics might shop early in the day as opposed to those who shop late in the day or late in the evening. The next data field is for the date 306. The date field permits the system to account for seasonal buying characteristics, holiday variations, and other buyer characteristics associated with the day of the week, month, or year. A weather data field 308 permits the system to further account for seasonal or other weather-related phenomenon. For example, rainy weather likely will result in a customer population favorably disposed to suggestions for purchases of rain gear such as boots, umbrellas, and overcoats, regardless of other purchases made during a store purchase transaction" (col 17, lines 30-47).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Cragun's discount services that are determined based on calculations results of factors affecting discounts services to DeLorme's special offers/discounts related to temporal conditions. One would have been motivated to do this in order to better assess how temporal conditions affect transactions and offer optimal promotions.

Additionally, DeLorme discloses offering the services based on the confirmed reserved transaction and DeLorme discloses valid reservation confirmations and offering reservations that allow the utilization of special offers or discounts:

"The system provides printed or electronic output that may include any one or more of text itinerary, ordered set of travel maps, customized collection of information on points of interest information and a selected array of valid reservation confirmations, tickets and/or

Art Unit: 3622

discount coupons coded with elements for automated recognition and processing. Mobile users, including GPS-linked users, can access the system via wireless communication units (Abstract).

More particularly, the present invention relates to Travel <u>Reservation</u> and Information Planning Systems (TRIPS) that provide travel information and <u>special</u> offers for goods and services such as accommodations and <u>reservations</u> associated with such areas of interest (col 1, lines 30-37).

- (7)...These paperwork problems tend to be restricted to airline tickets and hotel reservation confirmations. However, a less developed but perhaps more important type of paperwork may be vouchers and various types of coupons associated with entertainment and activity sites located proximate to a travel destination (col 2, line 65-col 3, line 5).
- (28)...TRIPS output is further capable, at 147, of including an airline reservation or other transportation coupons or vouchers, and/or various special price discounts and/or extra services offered by an extensive range of accommodation and goods or service providers that can participate in TRIPS e.g., hotels, banks, campgrounds, retail stores, hairdressers, gas stations, restaurants, taxis, video rental shops, tour guides, public safety, or health facilities--among many others. Thereby, TRIPS output provides the advantages of "built-in" reservations, tickets and/or special offers--as an intrinsic part of digitally generated, electronic and/or printed travel plan output also typically including maps, travel directions, itinerary or scheduling information concisely arranged in relation to the geographical/temporal order of travel--rather than a loose disarray of easily misplaced travel papers. The transactions involved in TRIPS reservation, ticket and/or special offer services are described hereinafter, particularly referring to FIG. 8" (col 21, lines 40-57).

Art Unit: 3622

Also, DeLorme disclsoes discount services defined for different time intervals or time periods:

"(119) The 595 dialog box includes facilities for the user to input or accept special offers, such as a discount for meals at certain times. The user executes or "books" the proposed reservation, pushing the "BOOK IT" button in the "RESERVATIONS--TICKETS--COUPONS" dialog box. The TRIPS technology communicates the reservation request and facilitates its acceptance, rejection and/or alteration or a counteroffer from the participating provider e.g. the Palisade restaurant or its agent(s) (col 50, lines 40-50).

- (125)...a time-framed <u>special</u> offer for goods or services posted in TRIPS by a participating third-party provider; or a time/date as negotiated by and between the retail user and the TRIPS system operator and/or participating third-party provider for a dinner <u>reservation</u>, a theatre or musical performance ticket, an educational conference, a sports or cultural event, a scheduled flight or a passage or cruise by ship, and the like (col 52, lines 27-35).
- (166)...5) date/time i.e. one or more chronological points in time, time-frames or temporal ranges relating to the goods/services designated in the TRIPS map ticket e.g. air flight departure date/time, time period for which a <u>special</u> offer is open, curtain time or the duration or start time of an entertainment or educational event, seasonal/calendar/natural phenomena temporal information, hotel check-in time, service appointment date/time, the TRIPS user's estimated arrival time at a specific location (e.g. as computed by routing software in the TRIPS Geographic Subsystem), a mutually agreed-on meeting date/time entered by the user, and so forth" (col 67, line 60-col 68, line 5).

Baker further discloses offering specials in relation to timing and to changing conditions:

Art Unit: 3622

"This would enable a service provider to take advantage of rapidly changing conditions or short-term opportunities. As an example, several days before a scheduled flight, an airline might recognize that a flight was going to depart half-full. Under such circumstances, the airline might wish to offer discount benefits to members of particular enabling organizations which patronize the airline. The result is a marketing benefit for the airline and a special premium to the enabling organization, as well as its members" (col 9, lines 10-26).

Also, Demir (2001/0044788) discloses offering terms of a transaction or discount or price on goods or services based on a rate of reservation which is obtained by calculation results of factors affecting the transaction (Fig. 4, 5, 9, 10, and below):

"[0049] FIG. 4 is a block diagram illustrating the <u>dynamic pricing</u> system according to an embodiment of the invention coupled with a <u>booking</u> engine;

[0036] It is another object of the invention to provide a method for dynamically pricing air charter services that includes the steps of receiving trip request information, determining a maximal time allowance, forecasting demand based upon the demand modules, matching demand based upon the received trip request information, determining a price discount and outputting the adjusted sale price based upon the price discount with a cancellation policy directly associated with the price discount.

[0037] According to one embodiment, the invention provides for system integration of a booking system with an intelligent pricing module. This integration provides a seamless information transfer between a booking engine and a pricing module.

Art Unit: 3622

[0058] FIG. 4 shows a block diagram of the dynamic pricing system integrated with a booking system according to an embodiment of the invention. FIG. 4 shows an intelligent pricing engine 201 that dynamically prices air charter services based upon demand matching and forecasting. The intelligent pricing engine 201 is a decision support system that enables automatically setting prices before fulfilling a trip. The intelligent pricing engine 201 includes a computer 210 coupled to a storage device 220, a demand forecasting module 230 and a demand matching module 240. A booking engine is coupled to the intelligent pricing engine 201 and receives trip requests through various channels from customers.

[0077] In step S160, the system generates a price discount based upon the demand matching information, along with information related to incentive promotions, targets and competitions The process then goes to step S170".

Also, notice that Demir's 'bookings' are equivalent to reservations:

"[0063] As an example, a traveler 1 books a trip at a time t.sub.1 from point A to B starting at t.sub.1(A)".

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Demir's dynamic pricing based on demand targets and demands received to Schiff's and DeLorme's dynamic pricing based on a variety of factors relevant to the provider and/or users. One would have been motivated to do this in order to offer pricing or discounts relevant to the situation.

Art Unit: 3622

As an alternative to Demir, Campbell (5,918,209) discloses discloses offering terms of a transaction or discount or price on goods or services based on a rate of reservation which is obtained by calculation results of factors affecting the transaction (Fig 2a, 7, 8, 11a, 11b, Claim 36, Claim 43).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Campbell's dynamic pricing based on demand targets and demands received to Schiff's and DeLorme's dynamic pricing based on a variety of factors relevant to the provider and/or users. One would have been motivated to do this in order to offer pricing or discounts relevant to the situation.

Claims 2, 8, 9, 10, 11, 12: Schiff discloses a method, system, apparatus, medium for accepting transaction reservation provided with a plurality of terminal devices, and an apparatus for accepting transaction reservation, connected to the terminal devices respectively, to accept reservation for a transaction of a transaction target, characterized in that said accepting apparatus comprises:

- (i) a terms determination means for determining terms for a transaction of a transaction target (col 11, line 60-col 12, line 17; col 12, lines 22-36); and
- (ii) a transaction terms display means for displaying the terms for the transaction determined by the terms determinations means (col 7, lines 20-34; col 12, lines 22-36); said terminal devices comprises:
- (i) an accepting means for accepting reservation application data which represents reservation application for a transaction of a transaction target based on the displayed terms (col 12, lines 17-23; col 12, lines 22-36); and

Art Unit: 3622

(ii) a transmission means for transmitting the reservation application data accepted by the accepting means to the accepting apparatus (col 12, lines 17-23; Fig. 1; Fig. 2A); and said accepting apparatus further comprises a storage means for storing received reservation application data, when the reservation application data is received (Fig. 2A).

Schiff further discloses a storage medium and a controller (Fig. 2A).

Schiff further discloses that incentives, time periods, and reservations are related (col 22, lines 1-13; col 1, lines 22-26), accepting the transaction reservation for the transaction target, performing a transaction in accordance with the transaction reservation (col 12, lines 17-36), and re-presenting data based on the accepted transaction reservation for the transaction target (col 11, lines 10-16; Fig. 2b; Fig. 3a).

Schiff does not explicitly disclose that the discounts are related to the time period that the reservation is made for.

However, DeLorme discloses that presenting bargain data to a transaction target related to the time period that the reservation is made for (Fig. 1c; Fig. 4; Fig. 5d, item 595; Fig. 6; col 41, lines 13-32; col 67, line 60-col 68, line 6; col 50, lines 38-45).

DeLorme further discloses re-presenting bargain data based on the accepted reservation for the transaction target (Fig. 9b; Fig. 7b; Fig. 7a; Fig. 5d, item 595).

DeLorme further discloses a terms determination unit for determining terms for a transaction of a transaction target for each time period (Fig. 1c; Fig. 4; Fig. 5d, item 595; Fig. 6; col 41, lines 13-32; col 67, line 60-col 68, line 6; col 50, lines 38-45); and

Art Unit: 3622

a display system for displaying the terms for the transaction, wherein the transaction reservations are made via the plurality of terminal devices based on the display terms for the transactions (Fig. 5d; Fig. 1c; Fig. 9b).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add DeLorme's reservations goods or services with time period based discounts to Schiff's time period, reservation, discount related information. One would have been motivated to do this in order to provide the customer with further, specific information on the relation of time periods, reservations, and discounts.

Baker further discloses benefits and discounts (col 1, lines 10-50); reservations (Fig. 3); timing restrictions and other terms on applicable discounts (col 1, lines 55-62); time frame restrictions and other terms on applicable discounts (col 5, lines 35-45; col 6, lines 40-47; col 6, lines 47-61; col 7, lines 4-11);

Baker further discloses offering specialized target discounts where the terms or target can be varied including varying time periods for when the discount would apply (col 8, line 60-col 9, line 10) and specialized discounts based on the time between the when the reservation is made and when the reservation is made for (col 9, lines 14-26).

Baker further discloses correlating time periods for reservations to discounts (col 9, lines 31-64).

Baker further discloses that different time periods have different discounts and that the discount information for the different time periods is dynamic (col 10, line 59-col 11, line 7). Also, note that Baker discloses that the time between when the reservation is made and the time that the reservation is made for can be relevant to the discount amount (col 9, lines 14-26).

Art Unit: 3622

Therefore, both the reservation time and the time period the reservation is made for are relevant to the discount.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Baker's reservations for goods or services with time period based discounts that reflect temporarily changing conditions to Schiff's time period, reservation, discount related information. One would have been motivated to do this in order to provide the customer with further, specific information on the relation of time periods, reservations, and discounts.

Also, please see the analysis for claims 1 and 17 above.

Claim 3: Schiff and DeLorme and Baker and Cragun and Demir or Campbell disclose a method according to claim 2. Schiff further discloses that the determination of the terms for a transaction comprises: determining terms for a transaction based on the state of the transaction reservation (col 20, lines 35-49; col 22, lines 1-13).

Bake further discloses determining terms for a transaction based on the state of the transaction reservation (col 9, lines 15-25).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Baker's further features for determining terms for a transaction based on the state of the transaction reservation to Schiff's transactions, reservations, and varying terms. One would have been motivated to do this in order to honor the transactions appropriately based upon the set reservations conditions.

Claim 4, 6: Schiff and DeLorme and Baker and Cragun and Demir or Campbell disclose a method according to claim 2.

Art Unit: 3622

Schiff does not explicitly disclose confirming whether the reservation has been accepted.

However, Schiff discloses a variety of communication between a travel agent and a customer (col 1, lines 33-36). Schiff further discloses verifying that a customer is available (col 2, lines 35-40). Schiff further discloses booking and paying for a reservation (Fig. 3A, item 342, item 344).

Schiff further discloses receiving reservations, booking, and payment information (col 12, lines 17-23).

Schiff further discloses sending a response to a user computer after receiving messages from the user computer (col 11, lines 13-15).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made that Schiff's response to a user computer can be a confirmation of the reservation that the user has made. One would have been motivated to do this because user's are more confident that a reservation is valid when the user receives notification that the reservation was received.

Additionally, DeLorme discloses confirming whether the reservation has been accepted (Fig. 5d, item 595; col 3, lines 15-20).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made that DeLorme's confirmation of the reservation that the user has made to Schiff's response to a user computer'. One would have been motivated to do this because user's are more confident that a reservation is valid when the user receives notification that the reservation was received.

Art Unit: 3622

Claim 5, 7: Schiff and DeLorme and Baker and Cragun and Demir or Campbell disclose a reception method for deal booking according to claim 4.

Schiff further discloses that it is characterized in that it further comprises the following steps:

a method according to claim 4, further comprising the steps of:

determining discount services for the reserved transaction which has been confirmed to be accepted based on its terms (col 20, line 49-col 21, line 12; col 13, lines 17-22); and offering the discount services based on the confirmed reserved transaction (col 1, lines 22-26; col 22, lines 1-5; col 12, lines 14-17).

Since Schiff discloses that specific packages can be offered to specific customers and that packages can include special discounts and that specific customers can reserve transactions,

Schiff discloses offering the discounts for reserved transactions.

Claim 13, 14, 15, 16: Schiff discloses a method, apparatus for accepting a transaction reservation for a transaction target, comprising:

presenting bargain data in relation to the transaction target and reflecting time dependent booking (col 1, lines 22-26); and

accepting the transaction reservation for the transaction target, and performing a transaction in accordance with the transaction reservation (col 12, lines 17-36).

Schiff further discloses that incentives, time periods, and reservations are related (col 22, lines 1-13; col 1, lines 22-26).

Schiff further discloses re-presenting data based on the accepted transaction reservation for the transaction target (col 11, lines 10-16; Fig. 2b; Fig. 3a).

Art Unit: 3622

Schiff does not explicitly disclose that the discounts are related to the time period that the reservation is made for.

However, DeLorme discloses that presenting bargain data to a transaction target related to the time period that the reservation is made for (Fig. 1c; Fig. 4; Fig. 5d, item 595; Fig. 6; col 41, lines 13-32; col 67, line 60-col 68, line 6; col 50, lines 38-45).

DeLorme further discloses re-presenting bargain data based on the accepted reservation for the transaction target (Fig. 9b; Fig. 7b; Fig. 7a; Fig. 5d, item 595).

DeLorme further discloses a terms determination unit for determining terms for a transaction of a transaction target for each time period (Fig. 1c; Fig. 4; Fig. 5d, item 595; Fig. 6; col 41, lines 13-32; col 67, line 60-col 68, line 6; col 50, lines 38-45); and a display system for displaying the terms for the transaction, wherein the transaction reservations are made via the plurality of terminal devices based on the display terms for the transactions (Fig. 5d; Fig. 1c; Fig. 9b).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add DeLorme's reservations goods or services with time period based discounts to Schiff's time period, reservation, discount related information. One would have been motivated to do this in order to provide the customer with further, specific information on the relation of time periods, reservations, and discounts.

Baker further discloses benefits and discounts (col 1, lines 10-50); reservations (Fig. 3); timing restrictions and other terms on applicable discounts (col 1, lines 55-62); time frame restrictions and other terms on applicable discounts (col 5, lines 35-45; col 6, lines 40-47; col 6, lines 47-61; col 7, lines 4-11);

Art Unit: 3622

Baker further discloses offering specialized target discounts where the terms or target can be varied including varying time periods for when the discount would apply (col 8, line 60-col 9, line 10) and specialized discounts based on the time between the when the reservation is made and when the reservation is made for (col 9, lines 14-26).

Baker further discloses correlating time periods for reservations to discounts (col 9, lines 31-64).

Baker further discloses that different time periods have different discounts and that the discount information for the different time periods is dynamic (col 10, line 59-col 11, line 7). Also, note that Baker discloses that the time between when the reservation is made and the time that the reservation is made for can be relevant to the discount amount (col 9, lines 14-26). Therefore, both the reservation time and the time period the reservation is made for are relevant to the discount.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Baker's reservations for goods or services with time period based discounts that reflect temporarily changing conditions to Schiff's time period, reservation, discount related information. One would have been motivated to do this in order to provide the customer with further, specific information on the relation of time periods, reservations, and discounts.

Also, please see the analysis for claims 1 and 17 above.

Application/Control Number: 09/693,919 Page 26

Art Unit: 3622

Response to Arguments

5. Applicant's arguments with respect to claims 1-17 and 20 have been considered but are moot in grounds of the new rejection. Please particularly note the rejection of claims 1, 17 starting with the sections that states, "Additionally, DeLorme discloses offering the services based on the confirmed reserved transaction and DeLorme discloses valid reservation confirmations and offering reservations that allow the utilization of special offers or discounts. "and thru to the end of the rejection of the independent claims 1 and 17.

Also, the Amendment dated 10/6/05 states that critical features of the Applicant's claims are offering the services based on the confirmed reserved transaction, valid reservation confirmations, offering reservations that allow the utilization of special offers or discounts, discount services defined for different time intervals, time intervals within predefined time period based on a rate of reservation which is obtained by calculation results of factors affecting the transaction. Please see the stated section above in the rejection of claims 1 and 17 to see how the combination of the prior art renders these features obvious.

Also, Applicant's, 'factors affecting the discount service', and other features of the Applicant's claims are broad and or loosely defined and can be interpreted in several ways. Examiner further notes that it is the Applicant's claims as stated in the Applicant's claims that are being rejected with the prior art. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Examiner notes that while specific references were made to the prior art, it is actually also the prior art in its entirety and the combination of the prior art in its entirety that is being

Art Unit: 3622

referred to. Also, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

a) Bradford (20020004759) discloses dynamic pricing based on reservations made and other factors:

"[0056] For example, in the travel industry (hotel rooms, rental cars, travel vouchers, plane tickets, train tickets, bus tickets, and other ancillary services), sophisticated yield management systems incorporated into reservation systems may continually adjust the price of an item. Thus, the reservation system can continually use the process of FIG. 2 to update the pricing for a listed item. Thus, for example, the listing price (\$P) could be lowered or raised as needed. Similarly, as the departure time arrives, the item could be shifted from reward inventory to barter inventory.

[0065] Assuming that two days before the <u>reservation</u> night, the luxury hotel room is still not booked, the <u>reservation</u> system might lower the price, e.g. \$P of \$200, \$X of \$20, preference for barter. This is not a necessary set of changes, but one selected by the seller with a preference to moving the inventory and getting a sale rather than losing the room. At this new price,

Art Unit: 3622

the inventory just meets the barter/cash ratio of 20% and is classified as barter at step 202. Most generally, a tolerance around the barter/cash ratio %C 230 can be used. This may cause the re-computation of one or more rewards for other inventory by that seller--of which there is none in this example. The inventory would then be listed for barter at step 206 with the potential buyer needing to pay \$20 and #180.

[0066] In fact, the <u>reservation</u> system could be continually updating the pricing of an inventory item up until the time of sale. As such the process of FIG. 2 can be run continuously and separately from the process of FIG. 3 to allow for maximum seller pricing flexibility";

b) Fox (20050222865) discloses dynamic pricing based on reservations made and other factors:

"[0013] A second aspect of the invention provides a method for management of inventory items associated with future events, such as ad time segments. As before, the method includes steps of (a) receiving a customer request for an inventory item, (b) generating a table one or more inventory items that most closely correspond to the customer request using a price forecasting system,

COPYRGT. selecting an item from the table, and (d) generating a price quotation associated with the selected inventory item using the price forecasting system. Next, it is determined if the customer request comprises an order for which the customer is expected to pay, or a reservation of the selected inventory item, which reservation has an associated probability of

Art Unit: 3622

later becoming an order. Information is stored, e.g, in a data file on a hard drive or similar storage medium, describing the customer request, including an indication of whether the request is an order or reservation. Information needed for price recalculation associated with the customer request is input into the yield management system. This information can vary depending on the pricing strategy the yield management system employs, but preferably includes the amount of time sold and the identity of the time or program segment, including the station name and date. The pricing data is recalculated with the yield management system in a manner consistent with a pricing strategy implemented by the yield management system, so that price changes caused by a reduction in available inventory due to the customer order or reservation are taken into account. This represents a departure from prior practice in which reservations were not taken into account until such reservations matured into orders. According to a preferred form of this method, the recalculation is made in a manner that assigns reservations less weight than orders in making such recalculation, especially a weight proportional to an estimated probability that the reservation will later result in an order. An inventory management system corresponding to this method provides suitable software for entering, storing, retrieving data concerning reservations in a manner consistent with the described steps".

c) Walker (5,797,127) discloses prices related to changing conditions such as weather:

Art Unit: 3622

"(6) The underlying commodity is well defined for an option to buy an airline ticket for the first type of customer--it is a ticket on a particular flight. Pricing this type of option, however, is not straightforward because the option price will depend on a number of factors that are not present in other commodities. For example, the price of an option on a particular flight may depend upon the date and time of the flight, the day of the week, the <u>weather</u>, special occurrences in one of the cities (such as the Olympics) and numerous other factors".

Page 30

- d) Fox (6,584,447) discloses promotions related to changing conditions such as weather:
- "(42) In summary, the above conventional solutions to <u>weather</u> planning problems in retail all suffer from one or several deficiencies which severely limit their commercial value, by not providing: (1) regional and/or local specificity in measuring past <u>weather</u> impact and projecting future <u>weather</u> impact, (2) the daily, weekly, and monthly increment of planning and forecasting required in the retail industry, (3) ample forecast leadtime required by such planning applications as buying, advertising, <u>promotion</u>, distribution, financial budgeting, labor scheduling, and store traffic analysis, (4) the quantification of <u>weather</u> impact required for precise planning applications such as unit buying and unit distribution, financial budget forecasting, and labor scheduling, (5) reliability beyond a 3 to 5 day leadtime, (6) a predictive <u>weather</u> impact model, which links quantitative <u>weather</u> impact measurement through historical correlation, with quantitative forecasts, (7) the ability to remove historical <u>weather</u> effects from past retail sales for use as a baseline in sales forecasting, (8) an entirely electronic, computerized, EIS implementation for ease of data retrieval/analysis with specific functions that solve specific managerial planning applications, and (9) a graphical user interface representing a

Art Unit: 3622

predictive model in graphs, formats, and charts immediately useful to the specific managerial applications."

- e) Ouimet (6,078,893) discloses prices related to changing conditions such as weather:
- "(24) where [D] are the demand parameters, and [X] is the set of all variables for all items. Notice that in general, the sales of one item can depend upon the parameters of all the other items. The reason for this is that the demand for a single item can and usually does depend upon the demand for all other items. This can in general lead to a system of coupled equations that describe the demand for each item in a given group. The variables that affect the demand can include, but is not limited to, price, sales history, promotional activity, weather conditions, location, currency exchange rate, inflation rate, etc."

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arthur Duran whose telephone number is (571) 272-6718. The examiner can normally be reached on Mon- Fri, 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on (571) 272-6724. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Arthur Duran
Patent Examiner

... Thuran

11/3/05